

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: POLYP010.2 Issue date: 1/14/2020 Revision date: 7/18/2023 Supersedes version of: 1/12/2022 Version: 3.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form	: Mixture
Trade name	: CAST SERIE H (ALL SHADES)
Product code	: CAST H

1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category	
Use of the substance/mixture	

: Professional use, Industrial use

: White or colored concrete resin filling or protection skin-coat for machine or manual application

Title	Use descriptors
Uses in Coatings (3) (ES Ref.: ES - TR)	SU22, PROC3, PROC4, PROC5, PROC8a, PROC10, PROC11, ERC8e, ESVOC SPERC 8.3b.v1

Full text of use descriptors: see section 16

### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

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1.4. Emergency telephone number

No additional information available

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3	H226
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 2	H361d
Specific target organ toxicity – Single exposure, Category 3, Respiratory	H335
tract irritation	
Specific target organ toxicity – Repeated exposure, Category 1	H372
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H- and EUH-statements: see section 16	

#### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Harmful if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

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### 2.2. Label elements

Labelling according to Regulation (EC) No. 127	2/2008 [CLP]
Hazard pictograms (CLP)	HS02 GHS07 GHS08
Signal word (CLP)	: Danger
Contains	<ul> <li>styrene; Cobalt bis(2-éthylhexanoate); maleic anhydride; phthalic anhydride; Fatty acids, C14-18 and C16-18-unsatd., maleated</li> </ul>
Hazard statements (CLP)	<ul> <li>H226 - Flammable liquid and vapour.</li> <li>H315 - Causes skin irritation.</li> <li>H317 - May cause an allergic skin reaction.</li> <li>H319 - Causes serious eye irritation.</li> <li>H332 - Harmful if inhaled.</li> <li>H335 - May cause respiratory irritation.</li> <li>H361d - Suspected of damaging the unborn child.</li> <li>H372 - Causes damage to organs (hearing sense) through prolonged or repeated exposure.</li> <li>H412 - Harmful to aquatic life with long lasting effects.</li> </ul>
Precautionary statements (CLP)	<ul> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P233 - Keep container tightly closed.</li> <li>P241 - Use explosion-proof electrical/ventilating/lighting equipment.</li> <li>P260 - Do not breathe spray, vapours.</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.</li> </ul>

### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched (127087-87-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched(127087-87-0)	The substance is included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

### SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Not applicable

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3.2. Mixtures			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
styrene substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, PL, PT, RO, SE, SI, SK)	CAS-No.: 100-42-5 EC-No.: 202-851-5 EC Index-No.: 601-026-00-0 REACH-no: 01-2119457861- 32	25-40	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Calcium carbonate substance with national workplace exposure limit(s) (FR, HR, LV, PL)	CAS-No.: 471-34-1 EC-No.: 207-439-9	10 – 20	Not classified
phthalic anhydride substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, PL, PT, RO, SE, SK)	CAS-No.: 85-44-9 EC-No.: 201-607-5 EC Index-No.: 607-009-00-4	0.1 – 1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317
Fatty acids, C14-18 and C16-18-unsatd., maleated	CAS-No.: 85711-46-2 EC-No.: 288-306-2 REACH-no: 01-2119976378- 19	0.1 – 1	Skin Irrit. 2, H315 Skin Sens. 1, H317
Cobalt bis(2-éthylhexanoate)	CAS-No.: 136-52-7 EC-No.: 205-250-6 REACH-no: 01-2119524678- 29	<0.3	Eye Irrit. 2, H319 Skin Sens. 1, H317 Repr. 1A, H360Fd Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched substance listed as REACH Candidate (4- Nonylphenol, branched and linear, ethoxylated) substance listed in REACH Annex XIV (4- Nonylphenol, branched and linear, ethoxylated (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof)) substance identified as having endocrine disrupting properties	CAS-No.: 127087-87-0	< 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
maleic anhydride substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, PL, PT, RO, SE, SI, SK)	CAS-No.: 108-31-6 EC-No.: 203-571-6 EC Index-No.: 607-096-00-9 REACH-no: 01-2119472428- 31	< 0.1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372 EUH071

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
maleic anhydride	CAS-No.: 108-31-6 EC-No.: 203-571-6 EC Index-No.: 607-096-00-9 REACH-no: 01-2119472428- 31	( 0.001 ≤C ≤ 100) Skin Sens. 1A, H317

Full text of H- and EUH-statements: see section 16

### **SECTION 4: First aid measures**

4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects,	both acute and delayed
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	<ul> <li>May cause respiratory irritation.</li> <li>Irritation. May cause an allergic skin reaction.</li> <li>Eye irritation.</li> <li>May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.</li> </ul>

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Water spray. Dry powder. Foam. Carbon dioxide.</li><li>Do not use a solid water stream as it may scatter and spread fire.</li></ul>	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>Flammable liquid and vapour.</li> <li>Vapours may form explosive mixture with air.</li> <li>Toxic fumes may be released.</li> </ul>	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protect	tive equipment and emergency procedures	
6.1.1. For non-emergency personnel		
Protective equipment Emergency procedures	<ul> <li>Wear recommended personal protective equipment.</li> <li>Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.</li> </ul>	

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6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment	nt and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or
Other information	<ul><li>public waters.</li><li>Dispose of materials or solid residues at an authorized site.</li></ul>
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	<ul> <li>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.</li> <li>Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always</li> </ul>
	wash hands after handling the product.
7.2. Conditions for safe storage, including	g any incompatibilities
Technical measures Storage conditions Heat and ignition sources	<ul> <li>Ground/bond container and receiving equipment.</li> <li>Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.</li> <li>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> </ul>

### Special rules on packaging 7.3. Specific end use(s)

Storage area

No additional information available

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.1.1 National occupational exposure and biological limit values

styrene (100-42-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Styrene
WEL TWA (OEL TWA) [1]	430 mg/m³
WEL TWA (OEL TWA) [2]	100 ppm
WEL STEL (OEL STEL)	1080 mg/m³
WEL STEL (OEL STEL) [ppm]	250 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

: Store away from heat.

: Store in a closed container.

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maleic anhydride (108-31-6)		
United Kingdom - Occupational Exposure Limits		
Local name	Maleic anhydride	
WEL TWA (OEL TWA) [1]	1 mg/m³	
WEL STEL (OEL STEL)	3 mg/m <sup>3</sup>	
Remark	Sen (Capable of causing occupational asthma)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
phthalic anhydride (85-44-9)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Phtalic anhydride	
Remark	Respiratory sensitizer; skin sensitizer. (Year of adoption 2010)	
Regulatory reference	SCOEL Recommendations	
United Kingdom - Occupational Exposure Limits		
Local name	Phthalic anhydride	
WEL TWA (OEL TWA) [1]	4 mg/m³	
WEL STEL (OEL STEL)	12 mg/m³	
Remark	Sen (Capable of causing occupational asthma)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



### 8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

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#### Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
	Viton	6 (> 480 minutes)	>0.4		EN ISO 374
	Neoprene rubber (HNBR)	5 (> 240 minutes)	>0.35		EN ISO 374
	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.35		EN ISO 374

#### 8.2.2.3. Respiratory protection

### **Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

Respiratory protection			
Device	Filter type	Condition	Standard
Gas mask	Type A - High-boiling (>65 °C) organic compounds	Vapour protection	EN 14387

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

### Environmental exposure controls:

Avoid release to the environment.

9.1. Information on basic physical and ch	emical properties
Physical state	: Liquid
Colour	: Grey. Black. orange. brown. Blue. Violet. white. red. Yellow. Green.
Appearance	: Pasty.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Flammable liquid and vapour.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 31 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 8000 – 600000 mPa.s
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: < 110 kPa
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.6 – 1.8
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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#### 9.2. Other information

- 9.2.1. Information with regard to physical hazard classes
- No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

### SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

**10.2. Chemical stability** 

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

**10.5.** Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information		
11.1. Information on hazard classes as defined	d in Regulation (EC) No 1272/2008	
Acute toxicity (dermal)	Not classified Not classified Harmful if inhaled.	
CAST SERIE H (ALL SHADES)		
ATE CLP (dust,mist)	4.053 mg/l/4h	
Calcium carbonate (471-34-1)		
LD50 oral rat	<ul> <li>&gt; 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline</li> <li>420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral Toxicity - Fixed Dose Procedure)</li> </ul>	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))	
LC50 Inhalation - Rat	<ul> <li>&gt; 3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity),</li> <li>Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: EPA OPPTS 870.1300</li> <li>(Acute inhalation toxicity)</li> </ul>	
LC50 Inhalation - Rat (Dust/Mist)	> 3 mg/l Source: ECHA	
styrene (100-42-5)		
LD50 oral rat	> 5000 mg/kg	
LD50 oral	> 6000 mg/kg bodyweight Animal: hamster, Syrian, Animal sex: male	
LD50 dermal rat	> 5000 mg/kg	

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styrene (100-42-5)	
LC50 Inhalation - Rat	10 – 20 mg/l
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	10 mg/l/4h
ATE CLP (dust,mist)	1.5 mg/l/4h
Cobalt bis(2-éthylhexanoate) (136-52-7)	
LD50 oral rat	3129 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), 95% CL: 1750 - 5000
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2000 mg/kg
ATE CLP (oral)	3129 mg/kg bodyweight
maleic anhydride (108-31-6)	
LD50 dermal rabbit	2620 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	2620 mg/kg bodyweight
phthalic anhydride (85-44-9)	
LD50 oral rat	1530 mg/kg bodyweight Animal: rat, Animal sex: male
LD50 dermal rabbit	> 3160 mg/kg Source: HSDB
LC50 Inhalation - Rat	> 2.14 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	> 2.14 mg/l Source: ECHA
ATE CLP (oral)	500 mg/kg bodyweight
Fatty acids, C14-18 and C16-18-unsatd., mal	eated (85711-46-2)
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation	Causes skin irritation.
Calcium carbonate (471-34-1)	
рН	8 – 9 Source: HSDB
, ,	: Causes serious eye irritation.
Calcium carbonate (471-34-1)	
pH	8 – 9 Source: HSDB
Respiratory or skin sensitisation Germ cell mutagenicity	: May cause an allergic skin reaction. : Not classified
Carcinogenicity	Not classified
phthalic anhydride (85-44-9)	
NOAEL (chronic, oral, animal/male, 2 years)	3570 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic, oral, animal/female, 2 years)	1785 mg/kg bodyweight Animal: mouse, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)

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Reproductive toxicity	: Suspected of damaging the unborn child.
phthalic anhydride (85-44-9)	
NOAEL (animal/male, F0/P)	3570 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Generation: all major orans incl. reproductive organs were examined (migrated information)
NOAEL (animal/female, F0/P)	1785 mg/kg bodyweight Animal: mouse, Animal sex: female, Remarks on results: other:Generation: all major orans incl. reproductive organs were examined (migrated information)
STOT-single exposure	: May cause respiratory irritation.
styrene (100-42-5)	
STOT-single exposure	May cause respiratory irritation.
phthalic anhydride (85-44-9)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Causes damage to organs (hearing sense) through prolonged or repeated exposure.
Calcium carbonate (471-34-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	≥ 0.212 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
styrene (100-42-5)	
LOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat
LOAEC (inhalation, rat, vapour, 90 days)	0.21 mg/l air Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat
NOAEL (subchronic, oral, animal/male, 90 days)	10 mg/kg bodyweight Animal: mouse, Animal sex: male
STOT-repeated exposure	Causes damage to organs (hearing sense) through prolonged or repeated exposure.
Cobalt bis(2-éthylhexanoate) (136-52-7)	
LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.31 mg/l air Animal: rat
NOAEL (oral, rat, 90 days)	3 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
maleic anhydride (108-31-6)	
NOAEL (oral, rat, 90 days)	≈ 10 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
NOAEC (inhalation, rat, vapour, 90 days)	≈ 0.0033 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
phthalic anhydride (85-44-9)	
LOAEL (oral, rat, 90 days)	2500 mg/kg bodyweight Animal: rat, Animal sex: male
Fatty acids, C14-18 and C16-18-unsatd., mal	eated (85711-46-2)
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Aspiration hazard	Not classified
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styrene (100-42-5)		
Viscosity, kinematic	0.773 mm²/s	
11.2. Information on other hazards		
11.2.1. Endocrine disrupting properties		
Component		
Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched(127087-87-0)	The substance is identified for having endocrine disrupting properties but there is no additional data available	

### 11.2.2. Other information

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
	Harmful to aquatic life with long lasting effects. Not classified
Hazardous to the aquatic environment, long-term : (chronic)	Harmful to aquatic life with long lasting effects.
Calcium carbonate (471-34-1)	
LC50 - Fish [1]	> 56000 mg/l Source: ECOTOX
EC50 72h - Algae [1]	<ul> <li>&gt; 14 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)</li> </ul>
EC50 96h - Algae [1]	22000 mg/l Source: Ecological Structure Activity Relationships
styrene (100-42-5)	
LC50 - Fish [1]	1 – 10 mg/l
EC50 - Crustacea [1]	1 – 10 mg/l
EC50 72h - Algae [1]	4.9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	6.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	2.06 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.01 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Cobalt bis(2-éthylhexanoate) (136-52-7)	
LC50 - Fish [1]	22.32 mg/l Source: ECHA
EC50 - Crustacea [1]	5.89 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.654 mg/l Source: ECHA registration data
maleic anhydride (108-31-6)	
LC50 - Fish [1]	75 mg/l Test organisms (species): Lepomis macrochirus
LC50 - Fish [2]	75 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	330 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 150 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

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phthalic anhydride (85-44-9)		
LC50 - Fish [1]	> 99 mg/l Source: ECHA	
EC50 - Crustacea [1]	> 640 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	68 mg/l Source: ECHA	
NOEC (chronic)	16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	10 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '60 d'	
Fatty acids, C14-18 and C16-18-unsat	td., maleated (85711-46-2)	
LC50 - Fish [1]	≥ 1.17 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	> 5.3 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 2.76 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	

### 12.2. Persistence and degradability

### No additional information available

12.3. Bioaccumulative potential		
Cobalt bis(2-éthylhexanoate) (136-52-7)		
Partition coefficient n-octanol/water (Log Pow)	2.96 Source: ECHA	
phthalic anhydride (85-44-9)		
Partition coefficient n-octanol/water (Log Pow)	1.6 Source: HSDB	
12.4. Mobility in soil		
Calcium carbonate (471-34-1)		
Mobility in soil	4.971 Source: Quantitative Structure Activity Relation	
styrene (100-42-5)		
Surface tension	34 mN/m	
12.5. Results of PBT and vPvB assessment		
Component		
Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched (127087-87-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
12.6. Endocrine disrupting properties		
Component		
Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched(127087-87-0)	The substance is identified for having endocrine disrupting properties but there is no additional data available	
12.7. Other adverse effects		

No additional information available

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### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste treatment methods Additional information : Dispose of contents/container in accordance with licensed collector's sorting instructions.

: Flammable vapours may accumulate in the container.

### **SECTION 14: Transport information**

ADR	IMDG IATA ADN		RID		
14.1. UN number or ID number					
UN 1866	UN 1866	UN 1866	UN 1866	UN 1866	
14.2. UN proper shipping	g name	-		-	
RESIN SOLUTION	RESIN SOLUTION	Resin solution	RESIN SOLUTION	RESIN SOLUTION	
Transport document descr	iption			1	
UN 1866 RESIN	UN 1866 RESIN	UN 1866 Resin solution, 3,	UN 1866 RESIN	UN 1866 RESIN	
SOLUTION, 3, III, (D/E)	SOLUTION, 3, III	III	SOLUTION, 3, III	SOLUTION, 3, III	
14.3. Transport hazard o	lass(es)				
3	3	3	3	3	
14.4. Packing group					
	III III III III		III		
14.5. Environmental haz	ards			·	
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	
environment: No	environment: No	environment: No	environment: No	environment: No	
	Marine pollutant: No				

### 14.6. Special precautions for user

Overland transport		
Classification code (ADR)	:	F1
Limited quantities (ADR)	:	51
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T2
Portable tank and bulk container special provisions	:	TP1
(ADR)		
Tank code (ADR)	:	LGBF
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Operation (ADR)	:	S2
Hazard identification number (Kemler No.)	:	30

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Orange plates	30 1866
	1866
Tunnel restriction code (ADR)	: D/E
EAC code	: •3Y
Transport by sea	
Special provisions (IMDG)	: 223, 955
Limited quantities (IMDG)	: 5L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG) Special packing provisions (IMDG)	: P001, LP01 : PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Miscibility with water depends upon the composition.
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA)	: 10L : 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3
ERG code (IATA)	: 3L
Inland waterway transport	
Classification code (ADN)	: F1
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EX, A : VE01
Ventilation (ADN)	: 0
Number of blue cones/lights (ADN)	. 0
Rail transport Classification code (RID)	: F1
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T2
Portable tank and bulk container special provisions	: TP1
(RID)	
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID) Special provisions for carriage – Packages (RID)	: 3 : W12
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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### **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

### **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	CAST SERIE H (ALL SHADES) ; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	CAST SERIE H (ALL SHADES) ; styrene ; Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched ; phthalic anhydride ; Fatty acids, C14-18 and C16-18-unsatd., maleated	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	CAST SERIE H (ALL SHADES) ; styrene ; Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	styrene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
46.a.	Poly(oxy-1,2-ethandiyl), alpha4-nonylphenyl)- omega -hydroxy-, branched	Nonylphenol ethoxylates (NPE) (C2H4O)nC15H24O

#### **REACH Annex XIV (Authorisation List)**

Contains substance(s) listed on REACH Annex XIV: 4-Nonylphenol, branched and linear, ethoxylated (CAS 127087-87-0)

#### **REACH Candidate List (SVHC)**

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: 4-Nonylphenol, branched and linear, ethoxylated (CAS 127087-87-0)

#### PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): 4-Nonylphenol, branched, ethoxylated (127087-87-0)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out: styrene

### **SECTION 16: Other information**

Indication of changes			
Section Changed item Change Comments			
	CSR applicable	Added	
	Flash point (IMDG)	Added	
2.2	Hazard statements (CLP)	Modified	

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	

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Abbreviations and acronyms:		
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

### Full text of H- and EUH-statements:

Acute toxicity (inhal.), Category 4	
Acute toxicity (oral), Category 4	
Hazardous to the aquatic environment – Acute Hazard, Category 1	
Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Aspiration hazard, Category 1	
Corrosive to the respiratory tract.	
Serious eye damage/eye irritation, Category 1	
Serious eye damage/eye irritation, Category 2	
Flammable liquids, Category 3	
Flammable liquid and vapour.	
Harmful if swallowed.	
May be fatal if swallowed and enters airways.	
Causes severe skin burns and eye damage.	
Causes skin irritation.	
May cause an allergic skin reaction.	
Causes serious eye damage.	
Causes serious eye irritation.	
Harmful if inhaled.	
May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
May cause respiratory irritation.	
May damage fertility. Suspected of damaging the unborn child.	
Suspected of damaging the unborn child.	
Causes damage to organs through prolonged or repeated exposure.	
Very toxic to aquatic life.	

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Full text of H- and EUH-statements:		
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Repr. 1A	Reproductive toxicity, Category 1A	
Repr. 2	Reproductive toxicity, Category 2	
Resp. Sens. 1	Respiratory sensitisation, Category 1	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1A	Skin sensitisation, category 1A	
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

Full text of use descriptors		
ERC8e	Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)	
ESVOC SPERC 8.3b.v1	Uses in Coatings: Professional (SU22)	
PROC10	Roller application or brushing	
PROC11	Non industrial spraying	
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition	
PROC4	Chemical production where opportunity for exposure arises	
PROC5	Mixing or blending in batch processes	
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 3	H226	On basis of test data
Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 2	H361d	Expert judgement
STOT SE 3	H335	Calculation method
STOT RE 1	H372	Calculation method
Aquatic Chronic 3	H412	Calculation method

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Annex to the safety data sheet		
Product exposure scenario(s)		
ES Type	ES title	
Worker	Use of resins / resin mixtures - Commercial use	

Annex to the safety data sheet: Exposure scenario Reference number: POLYP010.2 Product form: Mixture Physical state: Liquid

1. Exposure scenario ES - TR
------------------------------

Use of resins / resin mixtures -	Commercial use
ES Ref.: ES - TR	
ES Type: Worker Version: 1.0	
Version: 1.0	
Revision date: 11/19/2019	

Use descriptors	SU22 PROC3, PROC4, PROC5, PROC8a, PROC10, PROC11 ERC8e ESVOC SPERC 8.3b.v1
Processes, tasks, activities covered	Professional application of coatings and inks by brush or roller Professional application of coatings and inks by spraying Covers the use in coatings (paints, inks, adhesives, etc) within closed or contained systems including incidental exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application activities and film formation) and equipment cleaning, maintenance and associated laboratory activities Widespread use by professional workers (PW)

### 2. Operational conditions and risk management measures

### 2.1. Contributing scenario controlling worker exposure (PROC3, PROC4, PROC5, PROC8a, PROC10, PROC11) (Concentration: ...;Duration: ...)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC10	Roller application or brushing
PROC11	Non industrial spraying

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 50 %

Operational conditions		
Amounts used	Daily amount per site	≤ 483 t/d
Frequency and duration of use	Covers frequency up to: 5 days per week	
	Covers daily exposures up to 8 hours	
	Avoid carrying out operation for more than 4 hours	PROC11
	Avoid carrying out operation for more than 1 hour	PROC8a

Risk Management Measures		
Technical conditions and measures to control dispersion from source towards the worker	Provide a good standard of controlled ventilation (5 to 10 air changes per hour)	

Annex to the safety data sheet: Exposure scenario Reference number: POLYP010.2 Product form: Mixture Physical state: Liquid

Risk Management Measures		
Organisational measures to prevent/limit releases, dispersion and exposure	Dispose of waste or used sacks/containers according to local regulations	
	Use tank pumps or carefully empty the container.	PROC5
	Close container tightly after use	PROC5
	Keep away people who are not involve by the operation.	PROC11
Conditions and measures related to personal protection, hygiene and health evaluation	Use long handled brushes and rollers.	PROC10
	Wear suitable gloves (tested to EN374) and eye protection	
	Wear a respirator conforming to EN140.	PROC4, PROC5, PROC10, PROC11
	Use suitable eye protection	
	For further information refer to section 8: "Exposure controls/personal protection"	

### 2.2. Contributing scenario controlling environmental exposure (ERC8e, ESVOC SPERC 8.3b.v1)

ERC8e	Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
ESVOC SPERC 8.3b.v1	Uses in Coatings: Professional (SU22)

Product characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 50 %

Operational conditions		
Amounts used	Daily amount per site	≤ 483 t/d
Frequency and duration of use	Continuous release	< 300 days/yr

Risk Management Measures			
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil	Provide onsite wastewater treatment.	≈ 91.9	
	Ensure all waste water is collected and treated via a WWTP		
Organisation measures to prevent/limit release from site	Prevent environmental discharge consistent with regulatory requirements		

### 3. Exposure estimation and reference to its source

### 3.1. Health

Information for contributing exposure scenario	
2.1	Datas of styrene's exposition values.

Long-term - systemic effects	
DNEL	Inhalation: Dermal:

# CAST SERIE H (ALL SHADES) Annex to the safety data sheet: Exposure scenario Reference number: POLYP010.2 Product form: Mixture Physical state: Liquid

Long-term - systemic effects						
Contributing scenario	inhalation exposure	RCR	dermal exposure	RCR	Sum RCR	Assessment method
PROC3, PROC4, PROC5, PROC8a, PROC10, PROC11 (Concentration: ,Duration:)	≈ 85 mg/kg bw/day	≈ 0.5	≈ 406 mg/kg bw/day	≈ 0.0092	≈ 0.509	Inhalation: EASY TRA v4.1 Dermal: EASY TRA v4.1

### 3.2. Environment

Information for contributing exposure scenario					
2.2		Datas of styrene's exposition values.			
		-			
Environmental exposure	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater		≈ 0.028		≈ 0.016	EASY TRA v4.1
Marine water		≈ 0.014		≈ 0.003	EASY TRA v4.1
Freshwater sediment		≈ 0.614		≈ 0.016	EASY TRA v4.1
Marine water sediment		≈ 0.307		≈ 0.003	EASY TRA v4.1
Soil		≈ 0.2		≈ 0.12	EASY TRA v4.1

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES		
4.1. Health		
Guidance - Health	Ensure that there is a suitable ventilation system. Wear suitable gloves (tested to EN374) and eye protection	
4.2. Environment		

Additional good practice advice beyond the REACH CSA			
Additional good practice advice	Training staff on good practice. Assumes a good basic standard of occupational hygiene is implemented		

Ensure all waste water is collected and treated via a WWTP

Guidance - Environment